

CLAIMS:

1. A disc brake caliper, comprising: a housing and an anchor bracket, which are connected for relative movement during brake actuation, said housing having a bridge section for bridging, in use, a disc brake rotor, and a pair of brake mounting portions which extend substantially perpendicular to said bridge section for disposal in use, on either side of a disc brake rotor and for mounting of brake pads thereagainst on opposite sides of the rotor, in facing relationship therewith, said caliper further including a hydraulic service brake actuator and an electric parking brake actuator, each of said actuators being arranged for actuation against the rear of a first of said pair of brake pads for displacing that pad away from the respective mounting portion and into engagement with one side of the rotor, the positions of actuation of said respective actuating members against the rear of said first brake pad being spaced apart.
2. The disc brake caliper according to claim 1, wherein, each of said hydraulic service brake actuator and said electric parking brake actuator including respective hydraulic and electric actuating members, are arranged to engage said rear of said first brake pad at said spaced apart positions.
3. The disc brake caliper according to claim 2, further comprising a friction lining disposed on said said first brake pad, wherein said hydraulic service brake actuator is arranged to engage said rear of said first brake pad at a position on said first brake pad to cause said friction lining to apply a substantially even pressure to said disc brake rotor across a face of said friction lining.

4. The disc brake caliper according to claim 3, wherein said hydraulic actuating member is arranged to engage said rear of said first brake pad in the region of the effective pressure centre of said first brake pad and said electric actuating member being arranged to engage said rear of said first brake pad eccentrically relative to said hydraulic actuating member.

5. The disc brake caliper according to claim 3, wherein said hydraulic actuating member is arranged to engage said rear of said first brake pad at a position generally centrally of said first brake pad and said electric actuating member is to engage said rear of said first brake pad eccentrically relative to said hydraulic actuating member.

6. The disc brake caliper according to claim 5, wherein said electric actuating member is arranged to engage said rear of said first brake pad closer to the bridge section of the disc brake caliper than said hydraulic actuating member.

7. The disc brake caliper according to claim 2, further comprising a friction lining disposed on said first brake pad, wherein said hydraulic service brake actuator includes a pair of hydraulic actuating members disposed generally symmetrically on either side of a generally central position of said first brake pad, said pair of hydraulic actuating members adapted for engaging said rear of said first brake pad at positions to cause said friction lining of said first brake pad to apply a substantially even pressure to said disc brake rotor across a face of said friction lining, said electric actuating member being disposed substantially midway between said pair of hydraulic actuating members and substantially centrally of said first brake pad.

8. The disc brake caliper according to any one of claims 2 to 7, wherein said hydraulic actuating member is a hydraulic

piston.

9. The disc brake caliper according to any one of claims 2 to 7, wherein said electric actuating member of said electric parking brake actuator is an elongate rod having a lengthwise axis.

10. The disc brake caliper according to claim 9, wherein said elongate rod includes a disc brake pad engaging portion for cooperating with an electric drive unit, said electric drive unit spaced from said disc brake pad engaging portion, said cooperation permitting said electric drive unit to displace said elongate rod toward and away from said disc brake rotor for parking brake actuation and release.

11. The disc brake caliper according to claim 10, wherein said electric drive unit is operable to displace said elongate rod axially by rotating said elongate rod about said lengthwise axis.

12. The disc brake caliper according to claim 11, further comprising a bore in said housing and a pair of mating threads disposed on said elongate rod and a wall at least partly defining said bore, wherein said elongate rod is disposed at least partly within said bore whereby said elongate rod is in threaded engagement with said bore, and whereby rotation of said elongate rod about said lengthwise axis causes an axial shift of said elongate rod relative to said bore.

13. The disc brake caliper according to claim 12, said cooperation including a worm gear fixed to said the elongate rod and cooperating with a worm driven by said electric drive unit.

14. A disc brake caliper, comprising: a housing and an anchor bracket, which are connected for relative movement during brake actuation, said housing having a bridge section for bridging, in use, a disc brake rotor having a first side

and a second side, and a pair of brake mounting portions which extend substantially perpendicular to said bridge section for disposal in use, on respectively on said first side and said second side of said disc brake rotor and for mounting of brake pads thereagainst in facing relationship with said first and second disc brake rotor sides, the disc brake caliper further including a hydraulic service brake actuator having a hydraulic actuating member and an electric parking brake actuator having an electric actuating member each of said actuating members being arranged for actuation against a rear of a first of said pair of brake pads for displacing said first brake pad away from said respective brake mounting portion and into engagement with one of said first and second sides of said disc brake rotor, the positions of actuation of said respective hydraulic actuating member and said electric actuating member against said rear of said first brake pad being spaced apart.